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PATENT APPLICATION
DOCKET NO.: 0399.1121-008

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Debra M. Eckert, David C. Chan, Vladimir Malashkevich, Peter A. Carr and Peter S. Kim

Application No.: 09/746,742

Group: 1614

Filed: December 21, 2000

Examiner: Not Assigned

For: Inhibitors of HIV Membrane Fusion

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231	
on	2-11-02
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JANE MORGAN	
Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted:

under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)

under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

under 37 CFR 1.97(c) together with either:
 a Statement under 37 CFR 1.97(e), as checked below, or

a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

under 37 CFR 1.97(d) together with:
 a Statement under 37 CFR 1.97(e), as checked below, and

a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Enclosed herewith is form PTO-1449:

- Copies of the cited references are enclosed. (References AA-AE, AL-AL2, AR-AZ, AR2-AZ2, AR3-AZ3, AR4-AZ4, AR5-AZ5, AR6-AZ6, AR7-AZ7, AR8-AZ8, AR9-AW9)
- Copies of cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
- the explanation provided on the attached sheet.
 - the explanation provided in the Specification.
 - submission of the enclosed International Search Report.
 - submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
 - the enclosed English language abstract.

Applicant requests that the following non-published pending applications be considered:

Examiner's
Initials

U.S. Patent Application No. 09/484,925 by David C. Chan, Deborah Fass, Min Liu, James M. Berger and Peter S. Kim, filed January 18, 2000, Docket No.: 0399.1167-005.

— U.S. Patent Application No. 09/364,497 by Debra M. Eckert, David C. Chan, Vladimir N. Malashkevich, Peter A. Carr and Peter S. Kim, filed July 30, 1999, Docket No.: 0399.1192-004.

— U.S. Patent Application No. 09/668,072, by Debra M. Eckert, Tara R. Suntoke and Peter S. Kim, filed September 22, 2000, Docket No.: 0399.1192-007.

— U.S. Patent Application No. 09/738,945, by Michael J. Root, Michael S. Kay, David C. Chan and Peter S. Kim, filed December 15, 2000, Docket No.: 0399.2002-002

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Date _____

[X] A copy of each above-cited application, including the current claims, is enclosed.

[] A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- [] A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- [] Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.
- [X] Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

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Dated: *February 11, 2002*

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ATTORNEY DOCKET NO.
0399.1192-008APPLICATION NO.
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AU	Borchardt, Allen et al., "Small Molecule-dependent genetic selection in stochastic nanodroplets as a means of detecting protein-ligand interactions on a large scale," <i>Chem. & Biol.</i> 4(12):961-968 (1997).
AV	Bullough, Per A. et al., "Structure of influenza haemagglutinin at the pH of membrane fusion," <i>Nature</i> 371:37-43 (1994).
AW	Caffrey, Michael et al., "Three-dimensional solution structure of the 44kDa ectodomain of SIV gp41," <i>EMBO J.</i> 17(16):4572-4584 (1998).
AX	Cao, Jie et al., "Effects of Amino Acid Changes in the Extracellular Domain of the Human Immunodeficiency Virus Type 1 gp41 Envelope Glycoprotein," <i>J. Virology</i> 67(5):2747-2755 (1993).
AY	Chabala, John C., "Solid-phase combinatorial chemistry and novel tagging methods for identifying leads," <i>Curr. Opin. Biotech.</i> 6:632-639 (1995).
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AR2	Chambers, Philip, et al., "Heptad Repeat Sequences are Located Adjacent to Hydrophobic Regions in Several Types of Virus Fusion Glycoproteins," <i>Journal of General Virology</i> , 71:3075-3080 (1990).
AS2	Chan, David C., et al., "Evidence that a Prominent Cavity in the Coiled Coil of HIV Type I gp41 is an Attractive Drug Target," <i>Proc. Natl. Acad. Sci. USA</i> 95:15613-15617 (1998).
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AU2	Chan, David C. and Kim, Peter A., "HIV Entry and Its Inhibition," <i>Cell</i> 93:681-684 (1998).
AV2	Chen, Yee-Hsiung et al., "Determination of the Helix and β Form of Proteins in Aqueous Solution by Circular Dichroism," <i>Biochemistry</i> 13(16):3350-3359 (1974).
AW2	Chen, Benjamin K. et al., "Distinct Modes of Human Immunodeficiency Virus Type 1 Proviral Latency Revealed by Superinfection of Nonproductively Infected Cell Lines with Recombinant Luciferase-Encoding Viruses," <i>J. Virology</i> 68(2):654-660 (1994).
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AR3	Delwart, Eric L., et al., "Retroviral Envelope Glycoproteins Contain a "Leucine Zipper"-like Repeat," <i>AIDS Research and Human Retroviruses</i> , 6(6):703-706 (1990).
AS3	Doering Don S. and Matsudaira, Paul, "Cysteine Scanning Mutagenesis at 40 of 76 Positions in Villin Headpiece Maps the F-Actin Binding Site and Structural Features of the Domain," <i>Biochemistry</i> 35:12677-12685 (1996).
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AU3	Eckert, Debra M., et al., "Inhibiting HIV-1 Entry: Discovery of D-Peptide Inhibitors that Target the gp41 Coiled-Coil Pocket," <i>Cell</i> 99:103-115 (1999).
AV3	Eckert, Debra M. et al., "Crystal Structure of GCN4-pl ₀ 1, a Trimeric Coiled Coil with Buried Polar Residues," <i>J. Mol. Biol.</i> 284:859-865 (1998).
AW3	Eckhart, Leopold et al., "Immunogenic Presentation of a Conserved gp41 Epitope of Human Immunodeficiency Virus Type I on Recombinant Surface Antigen of Hepatitis B Virus," <i>J. Gen. Virol.</i> 77:2001-2008 (1996)
AX3	Edelhoch, Harold, "Spectroscopic Determination of Tryptophan and Tyrosine in Proteins," <i>Biochemistry</i> 6:(7):1948-1954 (1967).
AY3	Fass, Deborah et al., "Retrovirus envelop domain at 1.7 Å resolution," <i>Nature Structural Biology</i> 3(5):465-469 (1996).
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AS4	Gallaher, William R., et al., "A General Model for the Transmembrane Proteins of HIV and Other Retroviruses," <i>Aids Research and Human Retroviruses</i> , 5(4):431-440 (1989).
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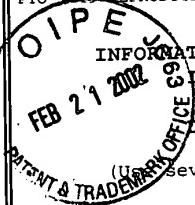
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AT6	Li, Zhe, et al., "Anti-malarial Drug Development Using Models of Enzyme Structure," <i>Chemistry & Biology</i> , 1:31-37 (1994).		
AU6	Lu, Min, et al., "A Trimeric Structural Domain of the HIV-1 transmembrane glycoprotein," <i>Nature Structural Biology</i> , 2(12):1-8 (1995).		
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AX6	Meng, Elaine C., et al., "Automated Docking with Grid-Based Energy Evaluation," <i>Journal of Computational Chemistry</i> , 13(4):505-524 (1992).		
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AT7	O'Neil, Karyn T. and DeGrado, William F., "A Thermodynamic Scale for the Helix-Forming Tendencies of the Commonly Occurring Amino Acids," <i>Science</i> 250:646-351 (1990).		
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AZ7	Root, Michael J. et al., "Protein Design of an HIV-1 Entry Inhibitor," <i>Science</i> 291:884-888 (2001).
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AT8	Singh, Mona et al., "LearnCoil-VMF: Computational Evidence for Coiled-coil-like Motifs in Many Viral Membrane-fusion Proteins," <i>J. Mol. Biol.</i> 290:1031-1041 (1999).
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AX8	Tyagi, Sanjay et al., "Multicolor molecular beacons for allele discrimination," <i>Nature Biotechnology</i> 16:49-53 (1998).
AY8	Weissenhorn, Winfried et al., "Assembly of a rod-shaped chimera of a trimeric GCN4 zipper and the HIV-1 gp41 ectodomain expressed in <i>Escherichia coli</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 94:6065-6069 (1997).
AZ8	Weissenhorn, W. et al., "Atomic structure of the ectodomain from HIV-1 gp41," <i>Nature</i> 387:426-430 (1997).
AR9	Weissenhorn, Winfried et al., "Crystal Structure of the Ebola Virus Membrane Fusion Subunit, GP2, from the Envelope Glycoprotein Ectodomain," <i>Molecular Cell</i> 2:605-616 (1998).
AS9	Wild, Carl et al., "A synthetic peptide inhibitor of human immunodeficiency virus replication: Correlation between solution structure and viral inhibition," <i>Proc. Natl. Acad. Sci. USA</i> 89:10537-10541 (1992).

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	AT9	Wild, Carl T. et al., "Peptides corresponding to a predictive α -helical domain of human immunodeficiency virus type 1 gp41 are potent inhibitors of virus infection," <i>Proc. Natl. Acad. Sci. USA</i> 91:9770-9774 (1994).	
	AU9	Williams, Kelly P. et al., "Bioactive and nuclease-resistant 1-DNA ligand of vasopressin," <i>Proc. Natl. Acad. Sci. USA</i> 94:11285-11290 (1997).	
	AV9	Youngquist, R. Scott et al., "Generation and Screening of Combinatorial Peptide Libraries Designed for Rapid Sequencing by Mass Spectrometry," <i>J. Am. Chem. Soc.</i> 117:3900-3906 (1995).	
	AW9	Malashkevich, Vladimir N. et al., "Core structure of the envelope glycoprotein GP2 from Ebola virus at 1.9- \AA resolution," <i>Proc. Natl. Acad. Sci. USA</i> 96:2662-2667 (1999).	
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